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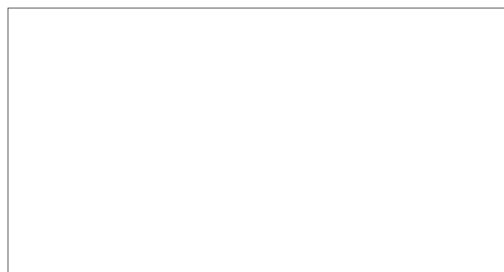
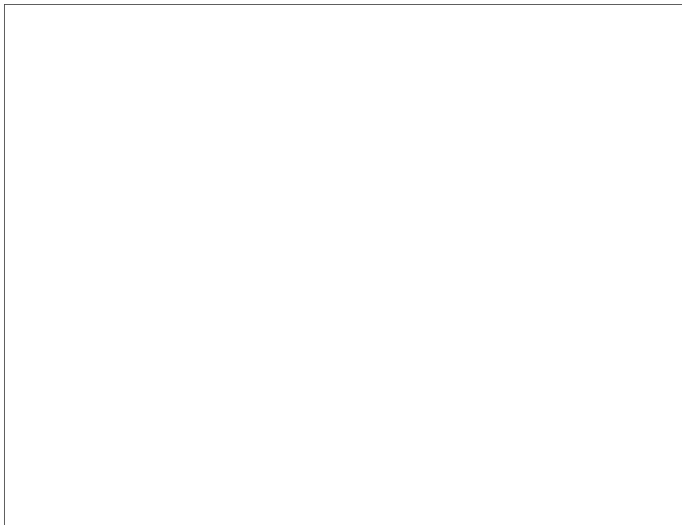
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Task 5

Progress Report #8 - Phase II, Model "C"

Objective: To produce four (4) developmental models of a miniature IR voice communicator, incorporating certain modifications resulting from evaluation of the design approval models shipped June 29, 1956.

Data: Trial mechanical assemblies of the major components have begun and final fitting of most of the parts has taken place.

The electronic subassemblies are completed and await final testing before installation.

Assembly of the optical components is essentially complete with the exception of the telescopic sights.

The mechanical changes indicated from evaluation of the design approval models have taken place as follows:

1. A neoprene light seal has been added between the cell mounting block and the cell housing tube. An opaque backing has been added to the cell holder.
2. The slip-on lens cover has been replaced with a removable cover held in place by a captive thumb screw. This cover attaches to the top of the unit during operation to become the sight mounting plate.
3. The open sights have been replaced with a three power telescopic sight with externally adjustable crosshair reticle.
4. The microphone connector has been replaced with a re-designed miniature microphone plug of greatly reduced bulk which will stay securely in place.
5. The beryllium copper battery contacts have been replaced with stainless steel contacts to avoid corrosion.
6. The lamp base has been shortened so that the new lamps supplied will not extend beyond the lamp socket base.
7. The mirror has a transparent slit made in the reflecting material to allow monitoring of the modulation through the side window.
8. The sliding cover over the modulation monitoring window has two detents added to it to hold it in position. A ridge has been added to the sliding element to make it easier to move.

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9. The captive screws now have Waldes Tru-arc flat "E" rings working against stainless steel inserts instead of the wire locking rings.
10. The wire to the contacts in the battery compartment door has been replaced with a contacting clip which mates with a contact embedded in the chassis when the battery compartment door is closed.
11. Galvanometers of increased sensitivity are being supplied with the current four units.

Program for next interval: Final mechanical trial assemblies will be completed and rough collimation checked. The remaining mechanical parts will be sent out for finishing and final assembly of the equipment will be commenced.

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